

In the winter the mountain sides are everywhere covered with *Selaginella rupestris* (L.) Spring. It is more upright and treelike than the eastern form. During a dry spell it appears to die away, but after a shower it immediately revives and becomes green again.

There are several species of *Equisetum*, the commonest being *Equisetum telmateia* Ehrh. The sterile plants resemble *E. arvense* but are twice as large. They may be found all summer near streams.

PASADENA, CAL.

A new Cuban fern

R. C. BENEDICT

(PLATE 2)

The discovery of the North or South Pole has never been of very great interest from the standpoint of botanical science, because there has been no prospect that such exploration would add any knowledge of botanical value. Geographically speaking, the botanically unexplored regions are practically all tropical, and such regions are still rather numerous. They occur principally in connection with high mountain ranges and on large islands. Some of these islands, like Java and Jamaica, are fairly well explored. Java is credited with about 600 species of ferns, and Jamaica has nearly as many, a large number of which are known only from this island.

But there are still several West Indian islands with high mountain ranges as yet only partly known, particularly Hayti, Porto Rico, and Cuba. In Cuba, for example, the highest range on the island, the Sierra Maestra, along the southern coast, has hardly been touched and probably contains a large number of ferns and other plants as yet undescribed.

Another hitherto unvisited Cuban range, the Sierra Nipe, located on the east side of the island, has recently been partially explored by Dr. J. A. Shafer, collecting for the New York Botanical Garden. From preliminary study, it appears that the collections contain a large number of undescribed flowering plants. The ferns have not been studied comprehensively, but in looking over the material of the genera included in the first part of Vol. 16 of the North American Flora, the writer found six species of *Anemia*, one of which is quite distinct from any species described in Mr. W. R. Maxon's monograph of the North American species.

It may be described as follows:

Anemia nipeënsis sp. nov.

Rootstock creeping, dorsiventral, rather slender, less than 2 mm. thick, branching, covered with very slender hairlike brown scales. Leaves in two rows, dimorphic, the sporophyl very attenuate, about 35 cm. long, 3-pinnate, with 3 or 4 pairs of scant involute pinnæ borne above the sterile leaves, the sterile leaves 20-30 cm. long, the petiole up to 20 cm. long, slender, blackish-brown below, paler above, sparsely scaly, the lamina deltoid, acute, 5-8 cm. long, 2.5-5 cm. broad, once pinnate-pinnatifid or even 2-pinnate on the basal pair of pinnæ, the pinnæ oblong to deltoid, rather bluntly acute, the margins somewhat revolute, slightly serrulate, the texture coriaceous and rigid.

Type collected on the Sierra Nipe, along trail Piedra Gorda to Woodfred, Oriente; on serpentine formation, 400-500 meters altitude; *J. A. Shafer, No. 3111*, 8 Dec. 1909. Type deposited in Underwood Fern Herbarium, New York Botanical Garden.

Anemia nipeënsis resembles *A. coriacea* Grisebach in the outline and texture of the sterile portion, but differs from this species in having wholly dimorphic leaves, instead of merely dimorphic pinnæ, as in that species. According to Mr. Maxon's key, it is closest to *A. aurita*

Sw. and *A. portoricensis* Maxon, but it differs strongly from these in the outline and texture of the divisions of the sterile lamina.

The genus *Anemia* is represented in the United States by two species, both of which extend north from tropical America. *A. adiantifolia* (L.) Sw., perhaps the commonest species of the genus, is found throughout the West Indies and in southern Florida. With its highly modified, erect basal pinnæ, it looks at first sight very much like a *Botrychium*. It is much more divided than *A. nipeënsis*. *A. mexicana* Klotsch, which ranges north from Mexico into Texas, is like *A. adiantifolia*, in having the basal pinnæ fertile, but the sterile portion is rather thin and herbaceous, once pinnate, and thus different from either of the other species above described.

The Cuban flora promises to be as rich in fern species as Jamaica, if the number of *Anemias* native there may be taken as an indication. Mr. Maxon credits twenty-six species of this genus to North America and records nine of these as found in Cuba. Recent collections of the New York Botanical Garden have included seven of these, and have added besides *A. nipeënsis*, *A. aurita* Sw. (either this or undescribed) and another which appears also to be undescribed. Dr. Shafer obtained in Oriente several numbers of the rare *A. coriacea* Griseb., and Mrs. N. L. Britton collected in Pinar del Rio what appears to be *A. speciosa* Presl, although her plant is bipinnate below, and in this respect not in agreement with Mr. Maxon's description of this species.

Thus, accepting twenty-eight as the number of North American species of *Anemia*, twelve of these are now known to occur in Cuba.

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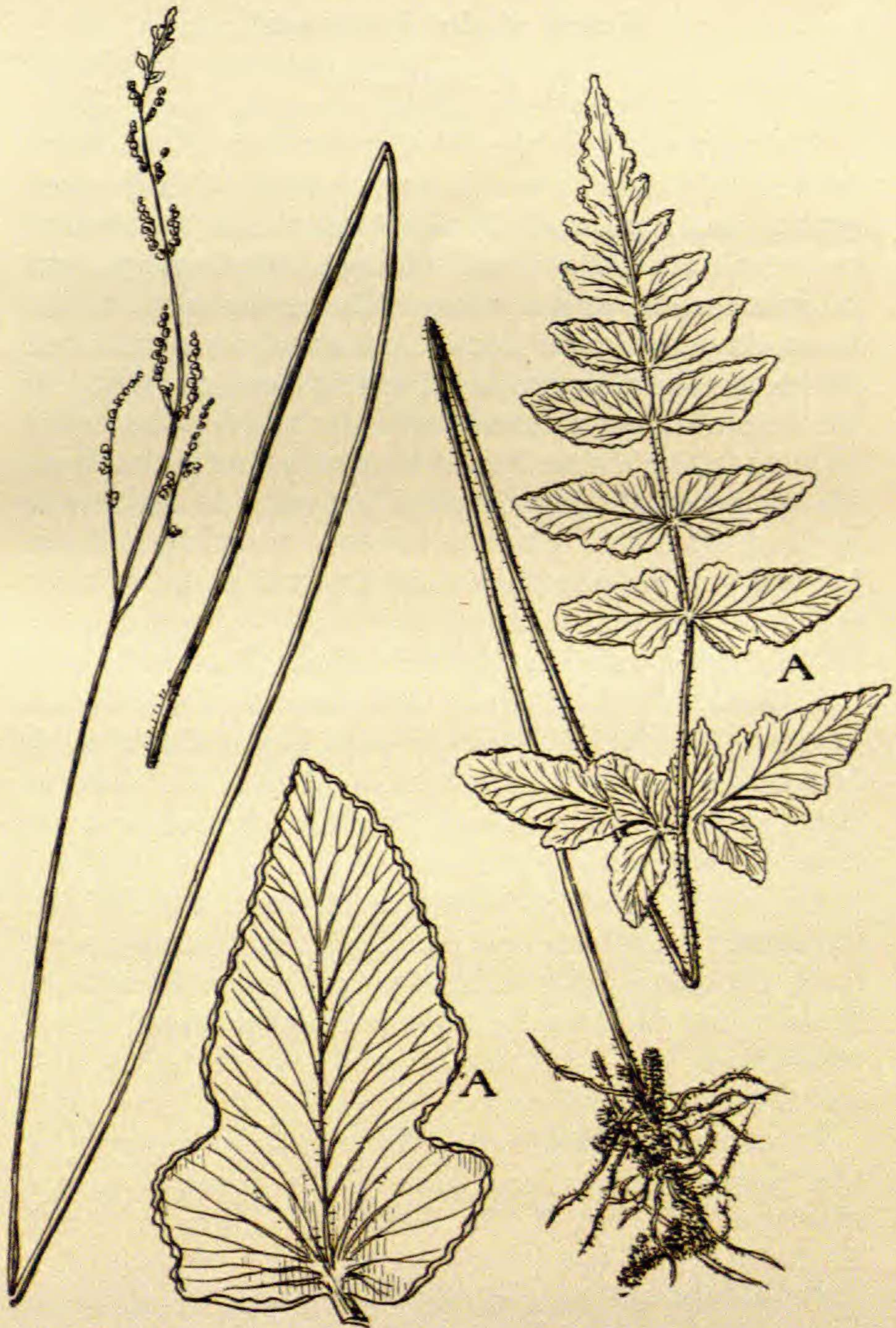


PLATE 2

ANEMIA NIPEENSIS Benedict

(Slightly reduced. One pinna. A, x 3.)